

Student Learning Outcomes for Math 98

Course Objectives

1. Understand and make connections between real numbers and expressions.
2. Develop the algebraic skills necessary for problem solving.
3. Develop the ability to model linear relations, including the use of graphing techniques as tools, for the purpose of solving contextual problems.
4. Manipulate and apply literal equations for the purposes of solving contextual problems.
5. Writing and communicating the results of problem solving appropriately.

Student Learning Outcomes

Upon successful completion of the course, students will be able to:

1. Simplify expressions containing integer exponents.
2. Apply scientific notation to contextual (real-world) situations.
3. Simplify square roots for perfect squares.
4. Apply order of operations.
5. Evaluate algebraic expressions.
6. Perform operations on and simplify polynomial expressions.
7. Factor polynomials
8. Understand the order relations on the set of real numbers and illustrate them on the real number line.
9. Translate between verbal expressions and algebraic or numerical expressions.
10. Identify and represent numerical or algebraic expressions in equivalent forms.
11. Solve linear equations and inequalities.
12. Solve factorable quadratic equations.
13. Solve and evaluate literal equations (formulas) of the first degree.
14. Solve systems of linear equations in two variables graphically and algebraically.
15. Formulate and apply a linear equation or inequality to a contextual (real world) situation.
16. Determine the slope of a line.
17. Graph linear equations by plotting points and using slope.
18. Identify and represent linear relationships in equivalent forms (i.e., graphical, algebraic, tabular, and contextual).
19. Apply formulas of area, perimeter and volume to basic 2- and 3-dimensional figures.
20. Apply the concepts of sets, subsets, intersections and unions to a real-world scenario.

Please note that homework assignments and review modules will also cover material from Foundational Studies. These are not listed here because they are not topics introduced in this class. The re-designed courses will merely reinforce these topics.

Last revised: July 14, 2018